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| **gold** | **Chemistry** | **شعار-القسم** |
| **Making metals** |
| Worksheet-3- |

|  |  |
| --- | --- |
| Name: Class: 8 /……........ | |
| Book pages: | |
|  | Date:17-4-2012 |
| 8.13.8 | Core Standard number |
|  | Learning Objectives  Logo + text 2 |

**A- Introduction:**

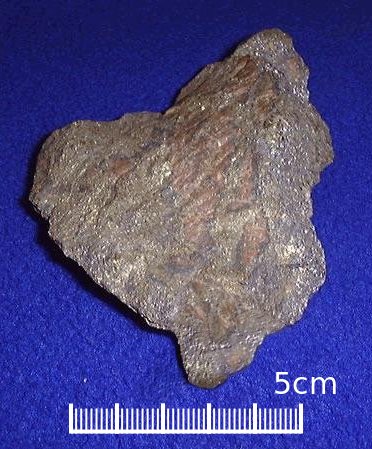
**1**- How are metals found in nature?

Most metals are generally found combined with other elements to form ore. Metals are obtained from their ores.

**2-** Examples of ores:



Iron ore



Gold ore



Lead ore

**B- Extracting metals:**

1- List the three types of metals according to their reactivity:

Metals of low reactivity( gold ), metals of medium reactivity ( zinc, iron, lead, silver and copper ) and metals of high reactivity( magnesium, calcium, sodium and potassium).

2- List the two methods of extraction of metals

* By using carbon
* By using electricity (electrolysis).

3- Extracting metals by using carbon

a- Which metals are extracted by using carbon?

Metals of medium reactivity are extracted by this method.

b- Example

lead oxide + carbon  lead + carbon dioxide

Iron(III)oxide +carbonIron + carbon dioxide

Generalization : metal oxide + carbon  metal + carbon dioxide

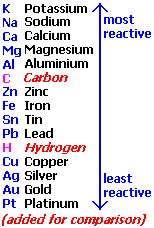
4- Extracting metals by using electricity

Metals of high reactivity are extracted by electrolysis.

5- Extracting metals of low reactivity.

They are generally found naturally uncombined as metals.

6- State on which the extraction of metals depends on?



The easy of extraction of a metal from its ore depends on its position in the reactivity series.